

NAME P/N QTY	CRIT	FAILURE MODE & CAUSES	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE						
POCKET RETRACTION SCREW, ITEM 146 SU792737-1, SU792738-1 (7)	1/3	146/POCKET Retraction, Jamming. CAUSE: Contamination.	END ITEM: Screw will not engage or thread completely into 146 poppet threads to retract 146 poppet. SFB INTERFACE: Retraction screw fails to open 146 poppet and maintains suit pressure 4.7 psi above 492 B14 pressure gauge reading, resulting in 12.7 psi suit pressure. MISSION: Loss of use of one LWP. Increased suit pressure will capture the suit, loss of hand treatment capability. CREW/VEHICLE: Possible loss of crewmembers from decompression sickness.	A. Design - The internal threads for the poppet are provided with a counterbore and the retraction screw has a chamfered point as lead-in features. The retraction screw must be inserted through a 0.220 inch diameter hole in the Item 146 upper housing crasher. These features provide centering during thread engagement and minimize the possibility of jamming due to cross threading. The threads for the retraction screw and Item 146 poppet are #4 (0.112) - 48, coarse threads. The retraction screw thread is visible to check for contamination and the internal thread is protected from contamination by the valve housing. B. Test - Certification Test - The poppet retraction serrated nut and screw completed the following certification cycles in 9/90 which are equivalent to the specification requirement of four times the 15 year expected use cycles: <table border="1"> <thead> <tr> <th>Test</th> <th>Actual Cycles</th> <th>Spec. Cycles</th> </tr> </thead> <tbody> <tr> <td>B14 poppet keeper re- traction cycles</td> <td>362</td> <td>312</td> </tr> </tbody> </table> C. Inspection - Thread characteristics of the screw and the Item 146 poppet are 100% inspected. Threads on the screw are also visually examined at final inspection, prior to shipment. D. Failure History - None. E. Ground Turnaround - The screw is inspected per FEMU-B-001.	Test	Actual Cycles	Spec. Cycles	B14 poppet keeper re- traction cycles	362	312
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CIL
 CME CRITICAL ITEMS LIST

10/24/98 SUPERSEDES DR/31/98

ANALYST:

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	U/S	166PKOS:		

7. Operational Use -

Crew Response -

POSTURE: Make every effort to use the bend treatment equipment without the positive pressure relief valve poppet retracted, since this will allow the potential for suit overpressurization to 12.7 psi above ambient, estimate suit pressure and relieve the excess using the helmet purge valve (i.e., do not rely on the HIA relief valve).

Training - Standard CME training covers this failure mode.

Operational Considerations -
 No constraints for single failure.

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